



Interim Report

August 2014

Prepared

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First Year Evaluation
of
The State Educational Technology
Implementation Fund Grants
Grant Cycle FY 2014 and FY 2015

Submitted to:

**Nevada Department of Education
and
Nevada Commission on
Educational Technology**

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For the purposes of this report, the grant awards were divided into two groups. Group 1 consisted of the following awards: Washoe, Elko, Lyon, Carson, Churchill, Douglas, White Pine, Mineral, and eLearning for Educators (nine grant awards). The evaluation related to these eight awards was developed through the joint work of Dr. Jacque Ewing-Taylor and Dr. Bill Thornton from the University of Nevada, Reno. Group 2 consisted of the following awards: Clark, Nye, and Lincoln (three grant awards). The evaluation related to these three grant awards was developed by Dr. P. G. Schrader from the University of Nevada, Las Vegas.

CONTENTS

Tables	4
EXECUTIVE SUMMARY	6
INTRODUCTION	8
State Educational Technology Implementation Fund Grant	8
Outline of the Interim Report	10
SECTION I: FY14 DATA COLLECTION	10
Interviews of Key Personnel	11
Survey of Teachers and Technology Directors	11
SECTION II: ALLOCATION OF FUNDS DISCUSSION	12
Background	12
SECTION III: IMPLEMENTATION DISCUSSION	15
Unfunded Requests	20
SECTION IV: ACTIVITIES AND RESULTS	23
Discussion of Activities by Priority by Grantee	23
Common Core State Standards Priority	23
1:1 Student Computing Priority	26
Smarter Balance Assessment Consortium Priority	29
Growth Model Priority	31
Summary of Activities by Grantee	33
Carson City School District	33
Churchill County School District	35
Clark County School District	35
Douglas County School District	41
Elko County School District	41
Lincoln County School District	43

Lyon County School District	43
Mineral County School District.....	45
Nye County School District.....	46
Washoe County School District.....	47
White Pine County School District.....	53
eLearning for Educators (e4e)	55
SECTION V: RESULTS OF SURVEYS	56
Results from Teacher Survey.....	57
Educational Technology Directors Survey	63
SECTION VI: REPORT SUMMARY	66
REFERENCES	67

TABLES

Table 1 Summary of Technology Funding by District by Student (FY14 plus FY15).....	14
Table 2 Graphic Summary of Priorities in Application by Grantee.....	17
Table 3 Summary of Stated Priorities in Application by Grantee	18
Table 4 Summary of Funding and Major Expenditures by Grantee	19
Table 5 Summary of Major Items NOT Funded by Grantee	21
Table 6 Investments Linked to Common Core State Standards	25
Table 7 Summary of Grantee Activities Linked to One-to-One Technology	27
Table 8 Summary of Activities Related to Smarter Balance Assessment Consortium	31
Table 9 Summary of Activities by Districts Related to Growth Model.....	32
Table 10 Years Taught	58
Table 11 Grades Taught.....	58
Table 12 Subjects Taught	59
Table 13 Professional Development	60

Table 14 Uses of SETIF Technology	61
Table 15 Teacher Self-Efficacy	62
Table 16 Open-ended responses from ed. tech. directors	64

EXECUTIVE SUMMARY

The Commission on Educational Technology (Commission) awarded 12 grants for FY14 and FY15. The Nevada State Educational Technology Implementation Fund Grants (SETIF) totaled approximately \$3.7 million. The funds were allotted in equal amounts for FY14 and FY15. Thus, approximately \$1.8 million was allocated each year. Twelve grants were awarded; 11 of the state's districts received grants. The following districts received funded grants: Carson City School District, Churchill County School District, Clark County School District, Douglas County School District, Elko County School District, Lincoln County School District, Lyon County School District, Mineral County School District, Nye County School District, Washoe County School District, and White Pine County School District. In addition, the Commission funded a small grant to provide professional development using technology for all school districts. Six school districts did not receive grants; Humboldt, Lander, Pershing, Storey, Eureka, and Esmeralda were not funded.

It is important to note that the actual funding was significantly less than the amounts requested by the districts. The funds were released to districts late in 2013. Districts were able to expend funds after final budgets were approved. Some districts started implementation in late 2013 while others started implementation in early 2014. However, by the time of site visits by the evaluation teams (early May), all districts had significant levels of implementation of their respective projects except for Douglas. Major points related to the Nevada State Educational Technology Implementation Fund Grants for the first year include the following:

- FY14 funds had direct impact on approximately 37,792 students and 96 teachers throughout the state.
- Many districts improved and/or replaced infrastructure to improve access to technology because adequate levels of access are necessary for all four priorities.

- Many of the districts used the funds to purchase one-to-one technology which was used for integration of technology into classroom instruction and for testing.
- The e4e grant provides state wide access for professional development for all districts within Nevada.
- Clark County School District invested infrastructure, online course tuition for teachers, professional development funds for teachers via digital coaches, and two project facilitators for the development of mathematics BLAST (Bringing Learning And Standards Together) modules. The district has made these modules available to other districts throughout the state.
- Washoe County School District invested in extensive professional development aligned with its efforts to implement 1:1 Student Computing and Common Core State Standards. However, the District reduced efforts related to Smarter Balance Assessment because of reduced funding of their proposal.

The investment in technology across the districts included personal learning devices, improvements to infrastructure and access, replacement of older equipment, professional development, and curriculum development. In general, the stakeholders who were interviewed indicated that the funds from the State Educational Technology Implementation Fund Grant were used to improve the integration of technology into the classroom. The methods across the districts varied widely.

INTRODUCTION

STATE EDUCATIONAL TECHNOLOGY IMPLEMENTATION FUND GRANT

To support educational technology within public schools, Nevada established the Trust Fund for Educational Technology (NRS 388.800). The Commission on Educational Technology (Commission) provides oversight and management of this fund. The purpose of the State Educational Technology Implementation Fund (SETIF) is to promote educational technology projects and programs that support K-12 education. Money from the fund may be used to obtain and maintain hardware and software for computer systems, infrastructure, and “other educational technology as may be approved by the Commission for use in classrooms” (NRS 388.800). In accordance with statute, the Commission provided a request for application (RFA) related to FY14 and FY15 with respect to State Educational Technology Implementation Fund Grants.

For this cycle, the Nevada State Educational Technology Implementation Fund Grants (SETIF) totaled approximately \$3.7M. The funds were allotted in equal amounts for FY14 and FY15. Thus, approximately \$1.8M was allocated each year. The Commission determined that grants should address one or more of the following funding priorities:

1. Common Core State Standards (CCSS);
2. Smarter Balance Assessment Consortium (SBAC);
3. Growth model;
4. 1:1 Student Computing;
5. Alternative Priority: Innovations in science, technology, engineering, and math (STEM) education and Nevada’s Involvement in the Nevada Stem Education Coalition.

The Commission on Educational Technology (Commission) awarded 12 grants for FY14 and FY15; 11 grant awards were to districts and one was awarded to a consortium (eLearning for Educators).

The following districts received funded grants: Carson City School District, Churchill County School District, Clark County School District, Douglas County School District, Elko County School District, Lincoln County School District, Lyon County School District, Mineral County School District, Nye County School District, Washoe County School District, and White Pine County School District.

The Commission funded the eLearning for Educators (e4e Grant), which is designed to provide professional development for teachers throughout Nevada. Grantees submitted proposals that outlined specific goals for technology implementation. Elko County School District acted as the fiscal agent for the e4e grant.

Five school districts were not funded: Eureka County School District, Esmeralda County School District, Humboldt County School District, Lander County School District, Pershing County School District and Storey County School District. Humboldt County School District and Pershing County School District made applications for funding; however, they did not meet requirements established by the Commission; therefore, they were not funded. Eureka, Esmeralda, Lander, and Storey did not submit applications for this funding.

The districts utilized various approaches to address the priorities that they established in the application. For the funded grantees, all 12 addressed Common Core State Standards, 9 addressed 1:1 Student Computing, 6 addressed Smarter Balance, and 5 addressed Growth Model. No grantee addressed the alternative priority (STEM). Within Commission established guidelines, the districts used the funds in the following general areas:

- Many districts purchased some form of technology for 1:1 Student Computing for students. One district issued individual devices to students, while others assigned devices to teachers in classroom units with carts for storage and charging.
- Several districts used funds to upgrade infrastructure to improve access to support the priorities. The improved access supported district efforts related to Common Core State Standards, Smarter Balance Assessment Consortium, 1:1 Student Computing, and Growth Model.
- Many districts invested in professional development for teachers related to selected priorities.
- Districts used the funds to support development and implementation of components related to Common Core State Standards.

OUTLINE OF THE INTERIM REPORT

This report is composed of six sections. Section I provides an overview of Year 1 data collection. Section II provides a discussion of the grant process and how the funds were allocated. Section III provides a discussion of the implementation for FY14 and projected implementation for FY15. Section IV provides a discussion of activities and results: baseline data, projected impacts, and district plans. Section V is a summary of the results of two surveys administered in May 2014. Section VI contains the report summary.

SECTION I: FY14 DATA COLLECTION

Sources of data for FY14 related to State Educational Technology Implementation Fund Grant consisted of documents analysis, results for surveys of teachers and directors, results from interview with key stakeholders, and observations at districts. Drs. Ewing-Taylor and Thornton collected data from grantees in Group 1 (Washoe, Elko, Lyon, Carson, Churchill, Douglas, White Pine, Mineral, and eLearning for Educators). Dr.

Schrader collected the data for the three grantees in Group 2 (Clark, Nye, and Lincoln districts).

INTERVIEWS OF KEY PERSONNEL

During May, evaluators met with key stakeholders associated with the eight grantees in Group 1. Similarly, evaluators met with key stakeholders with Clark County and conducted distance interviews with Lincoln and Nye Counties also in May. Stakeholders interviewed included teachers in classrooms with assigned technology, project directors for each grantee, principals in various buildings, and district technology personnel. In addition, selected classrooms with 1:1 Student Computing were observed and students provided examples of applications of the technology within the classrooms.

The focus of the site visits and semi-structured interviews was to collect data related to the implementation of the various types of technology, to document barriers encountered, to review expenditures, and to document the direct impacts of technology to date. Each interview lasted approximately one hour and a typical site visit lasted two to three hours.

SURVEY OF TEACHERS AND TECHNOLOGY DIRECTORS

Two survey instruments with questions related to the State Educational Technology Implementation Fund Grants were developed. One was designed for district directors of technology and the other was designed for classroom teachers. The surveys were administered through electronic means. All directors were asked to complete the survey and each director was asked to forward an electronic link to all teachers who were directly impacted by the SETIF grants. For example, a teacher who received 1:1 Student Computing technology in his/her classroom would receive the teacher survey link. Thus all technology directors, who work in funded districts, were asked to complete the survey designed for the directors. In turn, each was asked to send the link for the teacher survey to all teachers in their district who were directly impacted by the funds.

SECTION II: ALLOCATION OF FUNDS DISCUSSION

BACKGROUND

The proposals were due on September 4, 2014 to the Commission. The Commission held mandatory meetings with applicants on September 26 and 27 of 2014. Humboldt County School District and Pershing County School District made applications for funding; however, they did not attend these mandatory meetings. All other applicants were in attendance at these meetings. These meetings included a series of negotiations among applicants and with the Commission. Grantees were funded at a level below their initial request.

The successful applicants received an approved amount of funding for FY14 and for FY15. Applicants were required to submit a revised budget that reflected the approved amounts. After grantees received approval of their respective budgets, they were able to expend the funds. Some districts quickly revised budgets and started implementation by mid fall semester. Others started implementation in early 2014. Grantees had all begun implementation by early March with the exception of Douglas County School District. This district plans to implement its project at the beginning of school in fall 2014. The implementation timeline associated with the process, required revisions, and corresponding approval determined the amount of available information for this interim report.

Table 1 provides a summary of student enrollment, total funding by district, and funding by student within district. It is important to note that for most grantees, the funding varied from FY14 to FY15; however, the total funding for each year was fixed at \$1.8 million. Table 1 also provides a summary of student enrollment and the funded amount by student by district. The funds received by grantees ranged from \$10,000 for the e4e statewide professional development grant to \$1,972,000 for Clark County School District.

Nevada had approximately 427,000 students enrolled in September 2013. The largest two districts (Clark County School District and Washoe County School District) had approximately 315,000 and 63,000 students respectively. These two districts received State Educational Technology Implementation Fund Grants of \$1,972,000 and \$468,000 respectively.

As indicated in Table 1, total funding (funds for both years) across districts ranged from low of approximately \$50,000 for Nye County School District to a high of \$1,972,000 for Clark County School District. The eLearning for Educators project, which is a statewide project, received \$10,000 which provided approximately \$.02 per student. As indicated by Table 1, the smaller school districts received lesser total funds; however, the funding per pupil was significantly higher in smaller districts than the funding per pupil in the larger school districts. The funding per student within districts ranged from \$6.26 per student (Clark County School District) to \$216.71 per student (Mineral County School District). Washoe County School District received approximately \$7.43 per pupil for the biennium.

In summary, the districts with the largest student populations tended to receive larger total funding amounts; conversely, districts with smaller student populations tended to receive larger amounts per pupil. On a state wide basis, the State Educational Technology Implementation Fund Grants provided approximately \$8.60 per student (\$4.30/student/year). Each grant is discussed below; it is necessary to consider the size of student population, total funding, funding per pupil, and types of investments for each grant.

Table 1 Summary of Technology Funding by District by Student (FY14 plus FY15)

District	Student Count*	Student Count*Funded	Funding FY14 plus FY 15	Per Student
Clark	314,956	314,956	\$ 1,971,926.54	\$ 6.26
Washoe	62,967	62,967	\$ 468,131.00	\$ 7.43
Elko	9,949	9,949	\$ 188,570.00	\$ 18.95
Lyon	8,107	8,107	\$ 230,550.00	\$ 28.44
Carson	7,528	7,528	\$ 217,547.99	\$ 28.90
Douglas	6,120	6,120	\$ 226,761.15	\$ 37.05
Nye	5,257	5,257	\$ 49,884.83	\$ 9.49
Churchill	3,677	3,677	\$ 72,842.52	\$ 19.81
Humboldt	3,526		Not Funded	
White Pine	1,335	1,335	\$ 30,660.00	\$ 22.97
Lander	1,125		Not Funded	
Lincoln	973	973	\$ 108,139.05	\$ 111.14
Pershing	712		Not Funded	
Mineral	459	459	\$ 99,468.92	\$ 216.71
Storey	397		Not Funded	
Eureka	275		Not Funded	
Esmeralda	79		Not Funded	
eLearning for Educators	427,442		\$ 10,000.00	\$ 0.02
State Total Funding*	427,442	421,328 **	\$ 3,674,482.00	\$ 8.60

* Nevada Department of Education K-12 Student Enrollment September 24, 2013

** 6,114 students were enrolled in non-funded districts

Table 1 provides a summary of the estimated number of students who were either directly or indirectly impacted by the funds for FY14. The estimated number of students was reported by the Nevada Department of Education on September 24, 2013. A total of 427,442 students were enrolled in Nevada schools (see column 2) and a total of 421,328 students were enrolled in the funded districts. Thus, 98.6% of the students were enrolled in districts that

received funding. Correspondingly, 1.4% of the students (6,114 students) were enrolled in districts that did not receive funding.

SECTION III: IMPLEMENTATION DISCUSSION

The Commission determined that grants should address one or more of the following funding priorities:

1. Common Core State Standards (CCSS);
2. Smarter Balance Assessment Consortium (SBAC);
3. Growth model;
4. 1:1 Student Computing;
5. Alternative Priority: Innovations in science, technology, engineering, and math (STEM) education and Nevada's Involvement in the Nevada Stem Education Coalition.

Each applicant was required to select from the above priorities as a part of the application process. Table 2 and Table 3 provide summaries of the priorities addressed in the grant applications. All grantees (12) selected Common Core State Standards as a priority, 9 grantees selected 1:1 Student Computing as a priority, 6 grantees selected Smarter Balance Assessment Consortium as a priority, and 5 grantees selected Growth Model as a priority. None of the grantees selected the alternative as a priority (STEM). Three of the grantees selected all four of the priorities established by the Commission as priorities for funding.

The reduction in the awarded funding from requested amounts impacted the abilities of districts to address stated priorities. Some districts reduced emphasis on one or more of the priorities. One district eliminated one of the priorities. Several districts maintained their original priorities; however, they focused the funds on one priority. For example, several districts purchased one-to-one technology and searched for other funding to

support technology integration. As an illustration, districts provided professional development, charging and storage cabinets, and technical support for other funds. However, in general, the reduction in funding from proposed amounts was associated with corresponding reductions in the scopes of district projects. Again, most of the districts continued their priorities with a reduced emphasis on areas that were not funded and worked to find alternative funding.

The impacts of the State Educational Technology Implementation Fund Grants were both direct and indirect. Groups of students and teachers received access to 1:1 Student Computing within their classrooms. In one district, students received access to 1:1 Student Computing devices that were assigned individually to them. Such are examples of direct impacts for students and teachers.

Other students and teachers were indirectly, positively impacted by the investment of Nevada State Educational Technology Implementation Fund Grants. For example, improvements in infrastructure have resulted in better access to technology, and better one-to-one technology available in the classrooms. One-to-one technology in classrooms reduced pressures on traditional library services. Table 2 and Table 3 provide summaries by grantee by priority.

To some extent, all students and teachers within a funded district are positively impacted by improvements in infrastructure; however, for the purposes of this report such improvements are judged to have indirect impacts.

Table 2 Graphic Summary of Priorities in Application by Grantee

Districts	CCSS	One to One	SBAC	Growth Model	STEM	# priorities
Carson	*	*				2
Churchill	*	*				2
Clark	*		*			2
Douglas	*	*	*	*		4
Elko	*	*	*	*		4
Lincoln	*	*	*	*		4
Lyon	*	*		*		3
Mineral	*	*		*		3
Nye	*		*			2
Washoe	*	*				2
White Pine	*	*	*			3
e4e (P.D.)	*					1
TOTAL #	12	9	6	5		

*Priorities established by the Grantee

- Common Core State Standards (CCSS)
- 1:1 Student Computing (One-to-One)
- Smarter Balance Assessment Consortium (SBAC)
- Growth Model
- Alternative Priority: Innovations in science, technology, engineering, and math

Table 3 Summary of Stated Priorities in Application by Grantee

Districts	Priorities Selected by Grantee
Carson	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One)
Churchill	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One)
Clark	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • Smarter Balance Assessment Consortium (SBAC)
Douglas	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One) • Smarter Balance Assessment Consortium (SBAC) • Growth Model
Elko	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One) • Smarter Balance Assessment Consortium (SBAC) • Growth Model
Lincoln	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One) • Smarter Balance Assessment Consortium (SBAC) • Growth Model
Lyon	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One) • Growth Model
Mineral	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One) • Growth Model
Nye	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • Smarter Balance Assessment Consortium (SBAC)
Washoe	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One)
White Pine	<ul style="list-style-type: none"> • Common Core State Standards (CCSS) • 1:1 Student Computing (One-to-One) • Smarter Balance Assessment Consortium (SBAC)
eLearning (e4e P.D.)	<ul style="list-style-type: none"> • Common Core State Standards (CCSS)

A review of Table 2 and Table 3 indicate that all districts selected Common Core and most selected 1:1 Student Computing (9). Districts elected to address priorities in a variety of approaches. For example some districts used laptops to address four of the

priorities. Others districts enhanced their ability to access the internet as a method to address multiple priorities. Several districts selected Growth Model and SBAC. However, with the reduced funding, many districts elected to use funds to purchase individual student computing devices.

Some districts invested in improved infrastructure and professional development to support implement online assessment, common core, and growth model. Again, these types of investments in technology were judged to have indirect impacts. Each priority will be discussed individually below. A summary of the major areas of expenditures, over the grant period, by grantee is presented in Table 4.

Table 4 Summary of Funding and Major Expenditures by Grantee

District/Grantee	Total Funding	Description of Major Expenditures
Carson	\$ 217,547.99	ThinkPads for 6 th grade students
Churchill	\$ 72,842.52	Android tablets Keyboards, cases, and software, Carts Stipends (reduced) for 2 teachers to create e-books
Clark	\$ 1,971,926.54	Two math teachers hired as facilitators for BLAST module development Teachers awarded funds for after school professional development, developed by digital coaches Online professional development fees (TeacherLine, ASCD) Web technology Software 3 computers 2 proxy servers
Douglas	\$ 226,761.15	The district will purchase in late June and early July for implementation in fall 2014.
Elko	\$188,570.00	Laptops
Lincoln	\$108,139.05	Equipment for wireless WAN (78 802.11 a/c routers; cables, software)

District/Grantee	Total Funding	Description of Major Expenditures
Lyon	\$ 230,550.00	Infrastructure Support technology, software
Mineral		Re-conditioned used desk top computers & 2 printers to equip one classroom Gradepoint curriculum Broadband service
Nye	\$ 49,884.83	28 laptops and a cart
Washoe	\$ 468,131.00	Equip several classrooms for integration of technology 21 century professional development 40 teachers Professional development instructor salary
White Pine	\$ 30,660.00	ChromeBooks and carts
eLearning for Educators (e4e)	\$10,000.00	Each year the consortium will receive \$5000 for Administrative salary.

UNFUNDED REQUESTS

In competitive grant application procedures, it is quite common for part or all of a proposed project to be unfunded. The Commission had limited funds. For the State Educational Technology Implementation Fund Grants for FY14 and FY15 significant requests were unfunded. In total the amount requested by all grantees was approximately \$6.8 million. In addition, Humboldt School District and Pershing School Districts had requests that were not funded. Four districts did not apply for funding. Of the total requested by grantees, the Commission funded \$3.67 million for the two years. That is, the Commission funded approximately 54% of the amount requested. The major items requested but not funded are summarized in Table 5. It is important to note that major items in a small districts are not major items in a larger district. As indicated in Table 5, common unfunded items included 1:1 Student Computing devices, software, professional development and related costs, technology support, and stipends for teachers.

Table 5 Summary of Major Items NOT Funded by Grantee

Amount NOT Funded	Major items NOT funded in the final grant for FY14 & FY15
Carson City (\$197,000) (Approximately 48%)	Software for teacher devices 68 laptops for teachers Indirect costs IT Technician for 1:1 Student Computing Project
Churchill (\$ 62,000) (Approximately 46%)	Stipends for teachers to prepare ebook Equipment Fewer Tablets
Clark (\$1,377,000) (Approximately 41%)	One teacher in support of BLAST Professional development for Common Core State Standards Online Professional development (TeacherLine, ASCD; decrease by 75%) Technician support Indirect costs Equipment (e.g. 2 servers)
Douglas (\$162,000) (Approximately 42%)	I:1 Student Computing Devices projectors
Elko (\$200,000) (Approximately 51%)	Equipment: Laptops and carts
Lincoln (\$150,000) (Approximately 58%)	Professional development and instructional software Equipment: 157 Net Books, 20 iPads, 20 laptops, carts
Lyon (\$546,000) (Approximately 70%)	Sub days for coverage for professional development for teachers to support technology applications Travel to attend conferences Cell phone service Supplies Professional books and support materials Instructional software computers Indirect costs Internet service provider fees Web based software in four core subjects for two schools

Amount NOT Funded	Major items NOT funded in the final grant for FY14 & FY15
Mineral (\$ 68,000) (Approximately 41%)	Software to monitor student work from teacher's device Purchased reconditioned computers Equipment (headphones, webcams) Reduced costs of printers
Nye (\$30,000) (Approximately 37%)	36 laptops Carts
Washoe (\$217,000) (Approximately 32%)	The district reduced investments in: Trainers Professional development Instructional coaches Release time for professional development Instructional materials Video Conferencing cohort 21 st Century Teaching and Learning Cohort Workshops Personal Learning Devices w carts In general all components of the proposed grant were scaled back to reflect the level of funding.
White Pine (\$ 46,000) (Approximately 60%)	ChromeBooks and carts
eLearning (\$69,000) (Approximately 87%) (Elko fiscal agent)	Indirect costs Stipends for course facilitators Development of new courses Purchase of new courses
Total Not funded (\$ 3,124,000)* (Approximately 46%)	For this funding cycle, the Commission did not fund approximately \$3.1 million of requests (46% not funded).

*These amounts do not include requests from Humboldt and Pershing.

In summary, the Commission funded approximately 54% of the requests; or in the alternative, 46% of requests were not funded. The abilities of grantees to complete

proposed activities are related to funding. As stated above, grantees elected several strategies. These included searching for other funds, reduction of amount of effort, and elimination of some priorities. Grantees used one or more of these strategies.

SECTION IV: ACTIVITIES AND RESULTS

DISCUSSION OF ACTIVITIES BY PRIORITY BY GRANTEE

The following section presents the information structured by priority. Grantees identified priorities as a part of the application process. Individual priorities and related activities are discussed in the following section. As discussed above, none of the grantees selected the alternative priority, STEM. Therefore, the following section will discuss the four priorities and provide a summary of grantee activities related to those four priorities established by the Commission.

COMMON CORE STATE STANDARDS PRIORITY

Each grantee selected Common Core State Standards as a priority. Districts selected a variety of approaches to address common core. Carson City School District is using the 1:1 Student Computing devices to embed Common Core State Standards into the curriculum, teaching, and student learning. Churchill County School District used technology to facilitate innovative teaching and learning aligned with Common Core State Standards. Douglas County School District plans to use the 1:1 Student Computing and other technology to facilitate training and to integrate Common Core State Standards into the curriculum, teaching, and learning. Douglas County School District plans to implement the grant in fall 2014. Lyon County School District is using the technology to focus on assessment, instruction in core classes, and access aligned with Common Core State Standards. Elko County School District purchased 1:1 Student Computing devices to be used in core subjects to promote Common Core State Standards.

Table 6 presents a summary of investments by grantee that were associated with Common Core State Standards. To a large extent, the nature of the investment was determined by the resources that individual districts had available before the grant.

Investments included professional development and related costs, 1:1 Student Computing devices integrated into curriculum, teaching and related learning, and curriculum development.

White Pine County School District primarily invested in 1:1 Student Computing devices for student use. Clusters of devices with carts for storage were assigned to individual teachers. The district plans to use the devices to facilitate integration and implementation of Common Core State Standards into the curriculum, teaching, assessment, and student learning in relation to these standards. With reduced funds (\$30,000), the direct effects will be limited; however, the district envisions expanding to additional classrooms and other content areas aligned with Common Core State Standards as funds are available.

Washoe County School District aligned its efforts with implementation of 21st Century Learning Environment Project, which is aligned with Common Core State Standards. The district investments involved extensive professional development, workshops, and 1:1 Student Computing devices; these investments are related to district efforts to use technology to implement Common Core State Standards. The efforts are focused on CCSS English Language Arts and on CCSS Mathematics.

The eLearning for Educators will use its limited funds to support state-wide professional development related to Common Core State Standards and other efforts. The consortium is seeking other sources of funding to support efforts to provide professional development for teachers across the state.

Clark County School District connected its efforts to development and implementation of BLAST (Bringing Learning and Standards Together), a program to provide teachers with information on how to best implement content standards in their classrooms. Overall, the goal is to improve math instruction throughout the district. The current timeframe is one and a half to two weeks per standard. Each module contains five distinct parts: introduction, standard in depth, material on assessment, material on instruction, and a

reflective component. Clark indicated that these modules would be available to other district when developed.

In addition to BLAST, Clark County identified online training modules via TeacherLine and ASCD in an effort to support the development of teachers' understanding of the Common Core State Standards. Funds were made available to enroll in courses. Administrators also noted that after school training was linked directly to the Common Core. Teachers were provided financial support to attend these small professional development sessions.

Table 6 Investments Linked to Common Core State Standards

District/Grantee	Implementation linked to Common Core State Standards
Carson City	The district will fund teacher professional development to apply technology and implementation of Common Core State Standards from other district funds.
Churchill	Stipends (reduced) for math teachers to create ebook based on Common Core State Standards
Clark	BLAST module development 2 Math teachers to develop BLAST modules Hourly pay for teacher (e.g. videos for BLAST & CCSS lesson development) Online professional development fees for teachers to take courses (TeacherLine and ASCD)
Douglas	Notebooks used for online access to support Common Core State Standards Notebooks will support instruction and student learning related to CCSS
Elko	Laptops for students will be used to support Common Core State Standards and integration of technology in support of the standards.
Lincoln	Upgrade wireless network equipment and software Supports the district efforts of implement Common Core State Standards
Lyon	The District will use the 1:1 Student Computing within the instruction in the 4 core subjects. The goal is to increase rigor of lesson plans, increase student academic scores, motivation, and knowledge and skill.
Mineral	The district purchased electronic based curriculum and set up an alternative program for high school students to address Common Core State Standards.

District/Grantee	Implementation linked to Common Core State Standards
	District dropped the 1:1 Student Computing priority because they did not get the corresponding devices requested.
Nye	The laptops will be used to support district efforts to implement Common Core State Standards via ePortfolios.
Washoe	1:1 Student Computing , professional development, Integration of technology into 21 st Century project.
White Pine	1:1 Student Computing
e4e state-wide P. D. (Elko fiscal agent)	The professional development focused on Common Core State Standards to support all districts within Nevada

1:1 STUDENT COMPUTING PRIORITY

Nine districts selected 1:1 Student Computing as a priority for the grant application. Movement into an environment in which each student has access to an individual computing device presents problems for the districts. Stakeholders identified many of the issues, including lack of bandwidth, maintenance, technology support, ongoing replacement costs, and professional development for teachers.

A review of the applications and interviews of key district stakeholders from districts indicated that the exact type of one-to-one technology purchased varied from district to district. Some districts purchased tablet devices because tablets were much less expensive. However, stakeholders in some districts pointed out that tablets were less functional than laptops. Other stakeholders pointed out that as the number of 1:1 Student Computing devices increased, the demands on district access to internet service and requirements for improved infrastructure will increase proportionally. For example, a stakeholder from a small district explained that effective use of 1:1 Student Computing technology would require much better access to internet with increased bandwidth. Smaller districts in rural Nevada have limited access; indeed, some have almost no access. Access to high speed internet service continues to be a problem in small rural

schools. The investments that districts linked to 1:1 Student Computing are summarized in Table 7.

Table 7 Summary of Grantee Activities Linked to One-to-One Technology

District	Implementation linked to 1:1 Student Computing
Carson City	The district purchased 600 ThinkPads, which have been assigned to 6 th graders and related software (FY14). Each 6 th grade student in the district has been assigned a ThinkPad for their personal use. The students will use these devices for.... Related software was purchased. Broad Band for access for the ThinkPads. District will purchase 600 ThinkPads with software in FY15.
Churchill	Android tablets and charging carts
Clark	NOT SELECTED AS PRIORITY FOR GRANT
Douglas	1:1 Student Computing Devices to be purchased
Elko	laptops for student use to support learning selected classrooms
Lincoln	Upgrade wireless network equipment and software Supports 1:1 Student Computing throughout the district
Lyon	Technology to expand infrastructure Maintenance of technology Internet service provider fees for two schools
Mineral	Broadband fees for 1 year reconditioned computers Online curriculum
Nye	NOT SELECTED AS PRIORITY FOR GRANT
Washoe	1:1 Student Computing in selected classrooms with professional development District established a cohort of teachers w district support
White Pine	1:1 Student Computing with professional development in classrooms
e4e (Elko fiscal agent)	NOT SELECTED AS PRIORITY FOR GRANT
State total	A total of 9 Grantees selected 1:1 Student Computing

Carson City School District purchased ThinkPads with AT&T Broadband access. These devices were issued to all sixth grade students. The district used other funds to purchase sufficient devices to enable each middle school student to have a personal 1:1 Student Computing device. In addition, the district provided professional development as needed for teachers and technical support for the buildings and teachers as needed. The feedback from students, teachers, and administrators was very positive. The impacts of continuous student access to ThinkPads was viewed as extremely helpful. Teachers and principals

provide examples related to increased student motivation, time on task, differentiated instruction to

Churchill County School District purchased two classroom sets of Asus Android tablets, associated management software and two charging carts, for two middle school mathematics classrooms. These devices were determined to be the most cost-effective for the intended use, which was to support a 1:1 pilot program and to test the ebook the teachers were developing. In addition, the District purchased software to help manage checking out 1:1 Student Computing Devices if and when the decision is made to allow students to take devices home. The impacts of these devices in the classrooms was viewed very favorably by the teachers and students. Observations indicated that students were engaged and teachers were able to effectively work with individual and groups of students as needs were identified.

Elko purchased laptops because the district determined that devices with smaller capacity (e.g. iPads) were much less effective in promoting integration of technology into the classroom. One administrator indicated that tablets were judged to be less effective for classroom applications such as Microsoft Office. The laptops could be used to integrate 1:1 Student Computing into the classrooms, as well as applications for other priorities. The district assigned classroom sets of laptops with carts to selected classrooms. Classroom observations and interviews with teachers and administrators indicated that the project was working as planned. The ratio of 1:1 Student Computing devices to student across the total district was small; however, the impacts within the selected classrooms was judged to be significant and positive.

Lyon County School District expanded the infrastructure support in two buildings; Fernley Elementary School (FES) and Fernley Intermediate School (FIS). The improved access supported the use of 1:1 Student Computing within classrooms. The feedback indicated that, with the upgrades, access throughout selected buildings improved.

Washoe County School District purchased personal devices with carts to equip 6 individual classrooms. By design, the selected classrooms represented various grade

levels and core content levels including math, ESL, elementary, middle, and high school. In addition, the teachers are supported by district level technology support and professional development. The teachers are a cohort which meet regularly throughout the year; the district plans to expand the cohort for the upcoming year. Interviews and observations indicated that the implementation was consistent with the proposed plan (funded plan). As discussed earlier, the district had to reduce the plan in proportion to the funding.

White Pine County School District purchased ChromeBooks and assigned them to teachers in classroom groups with carts for storage. The teachers were selected based on district criteria related to interest, motivation, and planned applications of 1:1 Student Computing devices. Interviews and observations indicated that the implementation of the plan was consistent with the proposal.

SMARTER BALANCE ASSESSMENT CONSORTIUM PRIORITY

The technology coordinators who were interviewed explained potential problems that they expect when SBAC testing is fully implemented. These issues are parallel to the issues associated with implementing 1:1 Student Computing throughout a district and throughout the state. As Nevada moves to Smarter Balance Assessment Consortium (SBAC) testing, districts will need infrastructure which currently is not available in small rural districts and which is insufficient in others. In addition, some of the larger districts will encounter infrastructure problems. Most buildings have one or more computer labs and the principals are able to schedule testing of students through the lab. However, these same buildings do not have the capacity to test large groups of students at the same time. Infrastructure is a barrier for large group testing of students for schools and for districts.

Table 8 provides a summary of grant related activities for the five districts that selected SBAC as a priority: Clark, Douglas, Elko, Lincoln, and Nye counties. The activities ranged from improved access to the use of laptops for data collection and test taking.

Many districts focused on the development of the capacity to implement SBAC testing. For the rural districts, inadequate access and limited bandwidth are barriers to the effective use of online testing for large groups of students as required by SBAC.

One stakeholder in a small district explained that the district currently “batches assessments and then ships them;” that is, the district conducted the testing, accumulated the results by electronic means, and then sent the file to be processed. The results were not real time. In addition, this district did not have access to reliable internet service. A stakeholder from another district explained that during testing, all other forms of internet involvement by students and staff was restricted. Another stakeholder explained that testing in his district would need to be scheduled by grade level. Stakeholders indicated that movement to Smarter Balance Assessment Consortium testing would present great challenges for their districts. The districts that elected to work with this priority generally invested in improved access.

Clark County School District purchased servers and improved tech support in order to better support SBAC testing. Lincoln County School District invested to improve wireless internet service to support the ability to implement SBAC. Nye, Douglas and Elko County School Districts indicated that the 1:1 Student Computing devices would be used to implement SBAC. Several districts, which did not select SBAC as priority, indicated that they would use 1:1 Student Computing devices for student testing.

Table 8 Summary of Activities Related to Smarter Balance Assessment Consortium

District	Implementation linked to Smarter Balance Assessment Consortium
Carson City	NOT SELECTED AS PRIORITY FOR GRANT
Churchill	NOT SELECTED AS PRIORITY FOR GRANT
Clark	2 Servers will support the SBAC testing within the district.
Douglas	Notebooks for testing and data collection related to SBAC
Elko	Laptops for student will be use during testing. The data collected will be used to support improvement of instruction.
Lincoln	Upgrade wireless network equipment and software Supports district effort to implement SBAC
Lyon	NOT SELECTED AS PRIORITY FOR GRANT
Mineral	NOT SELECTED AS PRIORITY FOR GRANT
Nye	Laptops improve the student-to-computer ratio for SBAC testing in two schools
Washoe	NOT SELECTED AS PRIORITY FOR GRANT
White Pine	NOT SELECTED AS PRIORITY FOR GRANT
eLearning (Elko fiscal agent)	NOT SELECTED AS PRIORITY FOR GRANT
State total	Six districts selected SBAC as a priority for the grant.

GROWTH MODEL PRIORITY

Five districts indicated that the Growth Model was a priority for the grant: Douglas, Elko, Lincoln, Lyon, and Mineral counties. These districts linked investments in technology to using online assessments, better access to support student learning, and the need for better technology support. The investments related to the Growth Model are summarized in Table 9. Douglas and Elko indicated that 1:1 Student Computing devices will be used to support student development and to conduct assessments to measure student growth. Lincoln, Lyon, and Mineral indicated that improvements in infrastructure would support their efforts to implement the Growth Model. Again, when the topic of Growth Model was discussed, district technology coordinators explained the concerns related to limited access, the need for better access, and the need for better internet service. One district discussed connections between technology needs and its

district technology plan. In general the concerns were related to the ability to get and receive data in a real time manner. The effective use of technology in rural districts was repeatedly linked to better access.

Table 9 Summary of Activities by Districts Related to Growth Model

District	Implementation linked to Growth Model
Carson City	NOT SELECTED AS PRIORITY FOR GRANT.
Churchill	WAS NOT A SELECTED PRIORITY FOR GRANT.
Clark	WAS NOT A SELECTED PRIORITY FOR GRANT.
Douglas	Notebooks will be used to collect data related to the growth model and to guide instruction.
Elko	laptops will be used to collect data related to the growth model
Lincoln	Upgrade wireless network equipment and software Supports district efforts to implement the growth model
Lyon	Infrastructure improvements, Support technology, and software
Mineral	Improved broadband access
Nye	NOT SELECTED AS PRIORITY FOR GRANT
Washoe	NOT SELECTED AS PRIORITY FOR GRANT
White Pine	NOT SELECTED AS PRIORITY FOR GRANT
e4e	NOT SELECTED AS PRIORITY FOR GRANT
State total	Five districts selected Growth Model as a priority.

SUMMARY OF ACTIVITIES BY GRANTEE

The following section presents the information structured by grantee by selected priorities. Each grantee presented an all-inclusive application for funds to support efforts to integrate technology into teaching and learning within their districts. The districts understand the important role that technology plays in the future of education; therefore, they have worked to leverage the SETIF grants to the fullest extent possible. The following section provides a discussion of the efforts of each of the grantees and their investments in technology.

CARSON CITY SCHOOL DISTRICT

The Carson City School District established two priorities for the grant; 1:1 Student Computing and Common Core State Standards. To address these priorities, the district purchased ThinkPads, laptops, software, and increased broadband access. Carson City School District was awarded \$108,774 for FY14 and \$108,774 for FY15. The district projects that it will use the funds next year to purchase additional 1:1 Student Computing devices.

With funds from the grant, the district purchased ThinkPads which were assigned to individual sixth graders. That is, each sixth grader in the district was assigned an individual personal ThinkPad. In addition, to promote effective use of the ThinkPads, the district used funds from other sources to provide professional development at several levels (teachers, support staff, and leadership). The district purchased additional ThinkPads from other funds to enable the district to assign individual devices to each middle school student. The feedback from teachers, principals, and others in the district indicated that the ThinkPads were highly effective. For the most part, the students had very good access to the internet. One middle school building required additional routers and other infrastructure support which the district provided. However, at the time of the site visits, the problems had been resolved. The teachers and staff who were interviewed

indicated that the technology support staff were highly responsive when requests for support were made. Examples of short response time were provided.

Carson City School District was able to develop other sources of funding for extended implementation beyond SETIF moneys. The district purchased enough 1:1 Student Computing devices so that each middle school student had a personal device issued to him or her. The SETIF grant was only a small part of this expenditure. Because of the large number of devices purchased, the district received very favorable pricing. In addition, the district purchased broadband access for the devices. The evaluators were able to observe students using the devices in both middle schools. The feedback from students and teachers was overwhelmingly positive. Lessons, applications, and examples of student work were illustrated.

In summary, the interviews and observations indicated that the 1:1 Student Computing project had been rolled out very smoothly. The District found that breakage and damage to devices was extremely low. At the time of the visits, all devices were accounted for. One device had been broken beyond repair and the corresponding assessment had been paid by the student's parents. The district had implemented appropriate procedures to manage student access. The district is researching the possibility of providing insurance on the devices for the upcoming year, which would provide replacement for loss or breakage. The district used the grant funds in conjunction with other resources to provide 1:1 access to all students within each middle school. The district provided an environment in which every middle school student and each middle school teacher were directly impacted by the integration of technology into the teaching and learning process. However, direct impacts of the SETIF grant was limited to the 6th grade students. This is an example of a district that leveraged the grant funds into a much larger project.

CHURCHILL COUNTY SCHOOL DISTRICT

The Churchill County School District established two priorities for the technology grant: Common Core State Standards and 1:1 Student Computing. To address these priorities, the District invested in expanded infrastructure and related support activities. This expansion was designed to improve access; thus, supporting district efforts to implement Common Core State Standards and improve its 1:1 Student Computing projects throughout the district. Churchill County School District was awarded \$27,273 for FY14 and \$45,569 for FY15.

Interviews with key stakeholders indicated that the reductions in funding had resulted in a significant reduction in project scope. The planned eBook would not be finalized during this grant period because the stipends for the teachers to create the eBook were substantially eliminated. The amount left in this year's budget for eBook creation would result in only a few modules being created rather than the entire eBook. Nonetheless, all stakeholders were enthusiastic about the eBook project and were committed to continuing the project in the next funding year, when there is slightly more money allocated to stipends for this work.

CLARK COUNTY SCHOOL DISTRICT

The Clark County School District established two guiding priorities for the technology grant: Common Core State Standards and online testing via the Smarter Balance Assessment Consortium. To address these priorities, the District invested support for:

- Development of BLAST Modules;
- Financial support for teachers' professional development designed by digital coaches;
- Tuition reimbursement for online professional development pertaining to the Common Core State Standards (i.e., TeacherLine and ASCD);
- And infrastructure and related support activities (e.g., two large capacity proxy servers).

In addition, the District expanded infrastructure and related support activities. This expansion was designed to improve access; thus, support district efforts to implement Common Core State Standards and improve Smarter Balance Assessment projects throughout the district. Clark County School District was awarded \$905,660 for FY14 and \$1,066,266 for FY15.

Interviews were conducted with the educational technology director, project facilitators for BLAST, and digital coaches. Additional data were collected from teachers who received tuition reimbursements or professional development funds to attend training. Interviews with the educational technology director indicated that the purchasing was in place as planned and that the trainings had gone as planned.

BLAST: For a previous cycle of the State Educational Technology Implementation Fund, the district had established a framework to provide online professional development for teachers with respect to the state standards in mathematics (i.e., Brining Learning and Standards Together: BLAST). The main purpose of BLAST was to provide information to teachers on how best to implement each standard in mathematics. An online format was selected to broaden the available impacts of the training, particularly for teachers who do not have time available for Saturday training. Further, the material is appropriate for teachers that have made a transition to new courses or long-term substitutes in areas in which they don't have extensive training.

The previous project had completed 44 modules for k-8, many of which addressed clusters of standards. At the time of this writing, two former mathematics teachers were hired as project facilitators to complete additional content modules for 9-12. According to the project facilitators, it takes an average of 1.5-2 weeks to complete a single module. Six additional modules have been completed addressing nine standards. All standards are available from: <http://blast.ccsd.net/>.

Each module begins with extensive research associated with tasks, activities, and information about the standard or cluster of standards. Goals for this stage include: a good concept associated with the standard, the ability to contextualize the standard within daily teaching, and an

appropriate overview or purpose for the standard. Throughout the development of the modules, the facilitators engage in open dialogue with content coordinators to ensure good implementation.

Each BLAST module is divided into five distinct sections, each of which contains additional links and resources associated with the sections outlined below:

- 1) Introduction (overview, navigation instructions, standards at a glance)
- 2) Standard (full text of standard and a video slideshow on unwrapping standard)
- 3) Assessment
 - a. Provides example questions and guides on assessing the standard
 - b. Provides tasks for the teacher to print out and students to complete
 - c. Provides a list of common misconceptions and considerations with a focus on how to be proactive rather than reactive
- 4) Instruction
 - a. Includes a summary of best practices
 - b. Lists a set of good questioning for open ended responses
 - c. Includes an example lesson video
 - d. Provides a link to calculator resources
- 5) Collaboration (instructions to meet face to face or online)

Although BLAST is still being developed, there is promise that it will be an enduring and valuable resource. Last month, there were approximately 400 visits to the site, 1/3rd of which were from curriculum engine. This low figure may be explained by the fact that BLAST is currently deployed as a resource, rather than a requirement. A proposal has been submitted to include BLAST as a PDE course for the 2014-2015 year. Regardless, there remains an ongoing need for teachers within the Clark County School District to learn more about the academic standards. In the district, changing schools and courses is a fairly common occurrence. As such, the BLAST modules represent a centralized resource for teachers to learn more. Further, the resource will continue to be available in the future for teachers; once created, the BLAST

modules represent increased capacity to provide information and resources pertaining to the Common Core State Standards.

Digital Coaches: One of the principal goals for this component of the grant was to provide assistance to teachers in technology integration strategies and approaches. The training was viewed as a means to close technology related skill gaps throughout the district. By contrast to other PD, this training was conducted using a coaching format. Specifically, 12 coaches took part in an opt-in program to coordinate and negotiate with teachers for training across as many as 10 schools per coach. Unlike many PD efforts, teachers worked with coaches in smaller groups and were able to request training for technologies that the teachers perceived to be germane to their practice. Within the context of the grant, the funds were specifically allocated for teachers to attend after school training related to technology. Overall, the role of the coaches was to assist teachers in whatever methods that were necessary to integrate technology into the curriculum, including: modeling, planning, working with students (support), finding resources, and acquisition of new skills.

The support provided for this grant differs from other PD in several important ways. First, the PD differed in scope from more traditional examples throughout the district. In this case, small groups of teachers from one school participated in training. This contrasts to large groups of 70-300 teachers in one lecture-based training session. Second, the training took place after school rather than during the academic day, which would require substitutes as well as involve some disruption in students' experiences. Although not all schools elected to participate in this first year, which was conducted on an opt-in basis, interviews with digital coaches indicated several themes that highlighted successful components of this year's implementation.

Interviews with the digital coaches revealed a rich program in professional development for teachers across a variety of topics, including: Word, PowerPoint, Excel, interactive whiteboards, digital citizenship, and online tools like Edmodo.

By far, the most common impact that coaches identified was the development and increase of confidence, self-efficacy, and basic skills. Although the ultimate goal is to impact practice and

technology integration, the closure of teachers' basic skills gap was acknowledged to be an important first step and gateway to integration. In addition to skill building, coaches reported high levels of teacher satisfaction over the relevance of the PD. Specifically, coaches were able to select tools that were both pertinent to upcoming lessons and available for the teachers. Coaches cited the fact that teachers were using the tools within the classrooms for the intended lessons, often for the first time.

Overall, the training sessions were received well but utilized differently by the various schools. The smaller size resulted in higher levels of individual engagement as well as personal connections between the coaches and teachers. These connections helped establish relevance and accountability for the material learned as well as flexibility otherwise impossible with larger PD. Coaches were able to select topics that teachers requested as well as conduct follow-ups and provide additional support as necessary. Because of these personal connections, the teachers felt more empowered to achieve new things. They knew whom to contact with questions and formed collaborative working relationships with the coaches. By scheduling the training after school, coaches indicated that they were able to engage in highly complex activities that wouldn't be possible during a single day. Additionally, the small sizes facilitated scheduling logistics because coaches could negotiate with teachers directly and in unoccupied spaces, rather than work through the district offices.

The digital coaches reported several outcomes that indicated a favorable experience for this aspect of the grant. Teachers were engaged and felt that they were able to use the materials they learned in the PD. There was also overwhelming agreement that this year was instrumental in promoting confidence and competence to address higher levels of technology integration next year. Generally, the digital coaches lauded the ability to work with the teachers after school. It also enhanced their abilities to follow up with teachers and hold them accountable for the material they covered. Coaches observed a transformation of behavior, including testing new tools, bragging about their projects, and applying what they learned. Coaches cited the ability to work with groups of teachers in a single school, check in on those groups, and hold them accountable for the training the coaches provided.

Although the trainings were generally successful, the coaches listed a few suggestions for upcoming years. First, it was noted that the upcoming years should also focus on technology integration and best practices now that the coaches have build a foundation of basic skills. Second, coaches acknowledged the importance of including support staff (e.g., classroom aides) in the training who are currently ineligible for the financial support. Third, the coaches suggested exploring ways to broaden the impact while maintaining a small size. This could include satellite training or a central site-based training for teachers with similar needs and resources.

In summary, the interviews with coaches indicated that the program meets needs of teachers and the district in unique ways that are otherwise impossible without the funds. The personal connection, targeted and intentional training, and ability to strategically facilitate technology integration were all cited as reasons for continuing the project.

Tuition Reimbursement: Another component of grant was to provide per-credit reimbursement for online courses from TeacherLine (<http://www.pbs.org/teacherline/>) and ASCD (<http://www.ascd.org/professional-development/pd-online.aspx>). Both series of courses take approximately 15 hours to complete. At the time of the interviews, a total of 68 teachers completed the TeacherLine training and an additional 41 teachers had completed training on ASCD. Overall, the feedback from teachers confirmed that the experiences were positive, with means above 4.0 for question related to the quality of their professional development or training.

Infrastructure: At the time of this writing, two proxy servers to increase capacity and facilitate online SBAC testing was ordered and delivered. The proxy servers were selected due to their ability to handle almost three times the current capacity. With an additional two proxy servers to be purchased next cycle, the district will reach a goal of nearly five times the current capacity and exceed Common Core and SBAC guidelines per pupil. The coordinator noted difficulties in placing and filling orders. As a result, another server will be ordered much earlier, once the new annual cycle begins.

DOUGLAS COUNTY SCHOOL DISTRICT

The Douglas County School District established four priorities for the technology grant; as such, the district addressed all four in its application. To address these priorities, the district plans to invest in 1:1 devices, which will be used to support these four priorities. Douglas County School District was awarded \$75,342 for FY14 and \$151,418 for FY15.

The district has worked to align the purchases with its strategic plan and its technology plan. The increased number of notebooks will enable the district to increase 1:1 Student Computing and activities related to online assessment, Common Core State Standards, and implementation of the growth model.

Other districts have been able to negotiate very favorable purchase prices for devices if they purchased large numbers of computer. With this in mind, Douglas County School District elected to make the SETIF-funded purchases after it had access to funding for both years. It is important to note that Douglas County School District elected to expend all of the funds during the 2014-2015 school year. Thus, the evaluators did not visit Douglas County School District for the interim report. Douglas County School District did not expend any funds for the time period covered in the interim report.

ELKO COUNTY SCHOOL DISTRICT

The Elko County School District established four priorities for the technology grant. Thus, the district elected to address each priority in its application. To address these priorities, the district purchased 134 laptops. These laptops will be used to support the district's efforts in each of the four areas. They will be used to implement Common Core State Standards, the growth model, and 1:1 Student Computing. In addition, the laptops will be used to conduct online assessments. Elko County School District was awarded \$94,285 for FY14 and the same amount for FY15.

Key stakeholders interviewed included district level personnel, technology personnel, teachers, principals, and some students. Elko County School District provided laptops with a cart to selected classrooms. They felt that the laptops would enable a shift from

traditional textbook driven environment to effective online courses and/or blended courses.

Observations within classrooms demonstrated the use of technology to support students with a wide range of abilities. In addition, the interviews with teachers indicated that they were using the technology to individualize instruction and they provided examples of effective use for students with a wide range of abilities. A gifted student explained his ability to work at a fast pace; while several teachers provided examples of how the technology was supporting students with lesser ability.

During the classroom observations, the level of engagement was high and students were actively working. Students were working individually, in small groups, and with teachers. Teachers moved from student to student and from group to group. Students continued to work on assigned projects and students were not observed off-task.

Consistently, the stakeholders were excited about the laptops in the classrooms. An English teacher explained the effectiveness of the laptops and provided an illustration in relationship to teaching Shakespeare to high school students. She explained that the technology was continually in use. In her opinion the integration of 1:1 Student Computing devices had increased student engagement, student motivation, and student comprehension. She provided examples of each. The teacher explained that the laptops had increased student involvement and decreased behavior problems. The principal echoed these comments.

The Elko County School District has a joint agreement with Great Basin College for internet service. The district contracts for a part of the bandwidth of Great Basin College; however, this is a limiting factor for the district. The shared service will be an increasing concern as the district moves forward with 1:1 Student Computing and with SBAC assessments; Elko will need additional bandwidth that GBC may not be able to provide. Another concern is that as Great Basin College grows, it will not have available Bandwidth to share with Elko County School District.

LINCOLN COUNTY SCHOOL DISTRICT

The Lincoln County School District established one priority for the technology grant. Specifically, Lincoln County requested funds to upgrade and improve their district-wide wireless network and infrastructure. These improvements directly support Lincoln County School District's 1-1 netbook program as well as online testing via the Smarter Balanced Assessment Consortium.

As stated in their proposal, Lincoln County has endeavored to remove impediments to their 1-1 netbook initiative, including building capacity for students' devices. Lincoln County School District argued that the Common Core State Standards are addressed by virtue of technology-based online programs like MathXL or Mindplay MVRC. Further, the improved network is a necessity for online testing. Prior to funding, 56% of teachers reported difficulty with the wireless network and 62% indicated that improvements would positively impact students' overall experience in the classroom.

During the first year, all of the planned improvements have been made. A total of 78 wireless access points, two Gigabit switches, and necessary peripherals (e.g., power adapters, support contracts, cables) were purchased and installed. The coordinator noted that the budget cut from the original proposal resulted in some implementation challenges. One of the items that Lincoln County School District eliminated was the consulting fee for a network specialist. As a result, some minor issues arose that could have been avoided with a more experienced installer. However, at the time of this writing, interviews with the technician and technology coordinator indicated that any issues were quickly resolved and that the new system was functioning as intended.

LYON COUNTY SCHOOL DISTRICT

The Lyon County School District established four priorities for the technology grant; Common Core State Standards (CCSS), Smarter Balance Assessment Consortium (SBAC), Growth model, and 1:1 Student Computing. Lyon County School District was awarded \$126,050 for FY14 and \$104,500 for FY15.

To address these priorities, the district invested in expanded infrastructure, support technology, and software for Fernley Intermediate School and Fernley Elementary School. These investments in technology within these schools are aligned with district goals related to the grant priorities. Thus, the investments will support teaching and learning in four core areas, improved assessment, quicker access to data, and will promote data based decision making. This expansion was designed to improve access; thus, it supported district efforts to implement Common Core State Standards, to implement the Growth Model, to conduct online assessments, and to improve its 1:1 Student Computing projects throughout the district. Without good access, these priorities cannot be accomplished.

Evaluators met with representatives of the Lyon County School District during early May, 2014. The Director of Testing and Educational Technology, and key stakeholders associated with Fernley Elementary School and Fernley Intermediate School were interviewed. The interviews were very helpful; in that, they provided an understanding of the use of the funds provided by the grant, a view of the district short term goals, long term goals, as well as technology needs for the district.

The district was very positive about funds received from the grant and its ability to expand technology for educational applications. The importance of high speed internet service was discussed in detail. The need for high quality internet was linked to the district's ability to implement Common Core State Standards, Smarter Balance Assessment Consortium assessments, Growth Model, 1:1 Student Computing, and other advanced applications of educational technology. The district is very concerned about its ability to support continuous increases in applications of technology. Lyon County School District clearly explained that primary issues focused on bandwidth, speed of connectivity, and technology support personnel. Over the past several years, Lyon County School District has consistently worked to develop and maintain high quality internet service.

The stakeholders who were interviewed, indicated that the district would continue to work to expand services to students and to support applications. However, they were very concerned with the impacts on the system as the district moved to implement programs which increased the demand on the internet. They provided examples which illustrated the potential impacts of the investments. These impacts included improved efforts associated with implementing 1:1 Student Computing, online assessments, and continuous student access to the internet. Stakeholders explained in detail that rural Nevada school districts have access to very limited bandwidth; as a result, the problems include both access to technology and access to high speed internet.

In summary, the district was concerned about the continuously increasing demands on the internet and the restrictions imposed by distance in rural communities. Because the school serves a high populate of low income students, many do not have internet access at home.

MINERAL COUNTY SCHOOL DISTRICT

The Mineral County School District established three priorities for the technology grant: Growth Model, Common Core State Standards, and 1:1 Student Computing. To address these priorities, the district purchased 26 reconditioned desk top computers, 2 printers, and Gradepoint curriculum (software). These computers and related software were used to support an alternative education program which enabled credit recovery through the use of technology. The district has had difficulty with the expansion of bandwidth therefore funds will be carried forward into FY15. Mineral County School District was awarded \$69,469 for FY14 and \$30,000 for FY15.

Evaluators met with representatives of the Mineral County School District during early May 2014. The teacher for the “new technology” classroom described above and the district grant writer were interviewed. Both were very excited about the classroom that had been setup with the funds. They provided examples of credit recovery, student engagement, increased student motivation, and decreased behavior problems. The

District was very pleased that the State Educational Technology Implementation Fund Grant had enabled the purchase of computers and support for the one classroom described above. In the judgment of the stakeholders interviewed, the new technology had had significant impacts.

However, these staff members were very concerned with the low quality of internet service. They indicated that it was common for the system to “crash” several times during a day. This provided special problems for students who were testing at the time of the crash. They discussed ongoing issues of lack of quality internet service. The challenges to access the internet and to establish an acceptable bandwidth were discussed at length. Concerns were linked to the ability to apply 1:1 Student Computing, online SBAC testing, and quality internet service. Both repeatedly explained problems associated with multiple daily system crashes, requirements to limit the number of computers connected at one time, and negative impacts on teaching and learning.

However, the technology, the curriculum, and the corresponding courses have enabled the district to address individual student needs, to provide credit recovery, and to enhance the course offerings. Primary emphases include improvement of graduation rates and increased student achievement. Students using computers were observed. The district was extremely positive about the positive impacts of the grant funds for students.

NYE COUNTY SCHOOL DISTRICT

Nye County School District originally proposed a plan to help students create digital portfolios based upon the Nevada Academic Standards in Math with Gabbs Elementary and Tonopah Elementary schools. Grant funds were used to secure 28 laptops and a cart, which students would use in conjunction with Glogsters to show their understanding of each standard. However, technical issues associated with connectivity and the county’s Internet connection prevented students from loading the program. As a result, no digital portfolios were created during the evaluation period. The district has changed their Internet provider in an effort to eliminate future

complications. Further, plans are in place to begin early next year with discussion among teachers to create portfolios that add to the project.

In pursuit of related goals, however, teachers continued to work with students using the laptops that were secured using grant funds. Reports indicated that the students used the laptops daily to complete their readingeggs.com program, while frequently using other programs for math and/or research. Ultimately, this training and familiarity facilitated students successfully be able to test for the district's Northwest Evaluation Association Measure of Academic Progress (NWEA MAP). In this way, the district has leveraged the tools to prepare students for SBAC online testing. The younger students in these schools were rarely exposed to technology but now have had experience and practice with improving their keyboarding skills and preparing for testing.

WASHOE COUNTY SCHOOL DISTRICT

The Washoe County School District established three priorities for the technology grant application: Common Core State Standards, Smarter Balance Assessment Consortium, and 1:1 Student Computing. However, the Smarter Balance Assessment Consortium priority was removed as a priority for the grant because the district received reduced funding. The district invested in several important programs to integrate technology into instruction programs. The investments included:

- Professional development for teachers with related costs,
- Salaries for teachers for e-instruction development
- Costs associated with release time for teacher professional development
- Equipment costs

For Washoe County School District, all activities related to State Educational Technology Implementation Fund Grants were and will be framed by the district vision of 21st Century Learning. Washoe County School District established a Strategic Plan and the SETIF Grant and other grants (e.g. Teacher Incentive Fund Grant (TIF4)) have

been aligned with the strategic plan and essential 21st Century Competencies. The SETIF was specifically focused to support meaningful technology integration in classrooms. This was supported by observations and by interviews of key personnel. The district planned the investment to align with its efforts to implement Common Core State Standards and improve 1:1 Student Computing. Washoe County School District was awarded \$270,796 for FY14 and \$197,336 for FY15. To these ends, the districts invested the funds in a variety of projects which are outlined below.

21st Century Learning Academy: Washoe County School District established its 21st Century Learning Academy, which is designed to improve teaching and learning in alignment with Common Core State Standards. Funds were used to provide stipends for teachers' professional development to attend 21st Century Learning Academy. For this component of the professional development, the Academy focused on building teams of teachers from a few sites as teacher leaders in application of technology within their schools. The intention of this professional development and corresponding district support is to develop teams of teachers capable of applying and sustaining the use of technology aligned with 21st Century Learning initiatives. These efforts are unique to the individual building. The applications range from elementary teachers in self-contained classrooms, to high school ELL teachers, to middle school math teachers.

Professional Development: Funds were used to provide stipends for instructors to provide professional development for ActiveBoard (interactive electronic whiteboards) training for teachers. The district has started to develop a series of short instructional videos that blend technical "training" with classroom instructional applications for ActiveBoards. The director of technology for the district indicated that these videos will be made available for on-demand viewing throughout the district and will be available for use by other districts throughout the state. These videos will be used in in-service offerings for teachers; as a result, teachers will be able to select videos that are most appropriate for these needs.

Some professional development funds were used for digital video classes – 11 teachers participated in an in-depth exploration of the uses of digital video in classrooms to support 21st Century Competencies.

Cohort of Teachers for Application of Technology: Washoe County School District selected a cohort of teachers to receive technology for classroom instruction from the SETIF grant, through an application process. Applications were sought by district-wide announcement through principal advisory emails. The district received 19 applications and conducted a blind screening. The top-scoring six applicants were chosen in consideration of spreading the technology services across elementary school, middle school and high school and various content areas.

Evaluation of Rollout: The district has collected feedback and is conducting ongoing evaluations for the various components of the professional development related to the SETIF projects. The interviews of teachers and key personnel, the observations of classroom, and limited demonstrations by students all indicated that the rollout of the State Educational Technology Implementation Fund projects were successful. The district provided examples of feedback from various workshops and other sources. The comments included the following:

“Before I did this activity, I thought that the basic premise for 21st Century Learning revolved around more tech-based lessons (things like simply using a projector, SmartBoard, etc.). And now I see that it's SO MUCH MORE. Despite being a music teacher with a very limited schedule with the students (compared to the time they get with their classroom teachers), it makes me wonder how I can redesign nearly ALL of my lessons to incorporate the philosophy of 21st Century Learning. I know that if I start off wanting to redesign everything, then it will only be overwhelming and exhausting, so I'll have to start small and go from there.... But where to start???”

“After completing the sorting activity last night I have been thinking a lot about "how" I ask students to complete activities. As I was teaching today I was

evaluating if I was using 21st Century Learning skills, and if not, how I can modify the assignment to reflect 21st Century Learning skills. The skills described in the sorting activity are printed 6 slides to a page double sided and sitting on my desk. As I look at the activities I have planned, I am referencing the sorting activity slides to see if I can modify the activities to better reflect 21st Century Learning skills. I am not simply doing this because I'm taking this class. I am doing this because I think the students will enjoy and get more out of my class if I change my activities to reflect 21st Century Learning skills.”

“Thanks for last week's professional development on 21st Century Skills. Loved it! Please, please, please bring her [the trainer] back to dive deeper into this topic. :)”

Strengths of ITC: “The variety of topics covered and new information provided regarding integrating technology ... I am still trying to process all the completely awesome stuff we were presented with ... I am already integrating this into my curriculum now.”

“This class was more than I could have wanted. It introduced me to 21st century teaching, which I was completely unfamiliar with. It made me sit down and spend time reviewing web tools and games that I actually can use in my classroom.”

“For someone who has never taken an online course it really turned out to be very easy to navigate ...”

“I enjoyed the communication with other education professionals and especially liked hearing from people in all grade levels and positions. ... THANK YOU! Now I have a re-energized look at teaching, which is in the back of my head, as I plan lessons and am anxious to incorporate many of the new ideas I have.”

“The structure was friendly to people who may not be technologically proficient.”

“variety of activities that are applicable to the classroom. Copious resources, structure and guide for use of resources – the diversity of the projects – the excellent communication with and from the course instructors – the pacing of the various assignments – the emphasis on what 21st century skills are and what they should look like in the classroom. The layout and navigation of the course was well designed.”

The interviews of teachers and key personnel, observations of classroom, limited demonstrations by students all indicated that the integration of technology into these classrooms was effective. The feedback was consistently positive and illustrated positive impacts of the SETIF projects within Washoe County School District. The SETIF projects are well received by both teachers and students and have positively impacted teaching and learning. It is important to note, that in a large district the impacts of limited funds do not provide global impact to the total district; however, these projects were viewed by district personnel as strong pilot projects. Washoe County School District elected to focus its investments in specific areas aligned with 21st Century Learning Environment, professional development, and integration of technology into the classroom.

District Evaluation of SETIF

The district will include various approaches to evaluate the impacts of the SETIF projects. These efforts include:

- Ongoing data collection associated with teachers’ implementation of the six dimensions of 21st Century Learning include the following:
 - Classroom observations including coding of teaching practices aligned to the six dimensions
 - Continued collection of anecdotal impacts from teachers

- Number of teachers “enrolled” in badge program, progressing through “Explorer” to “Practitioner” and “Leader”

Projected Investment of funds of FY2015

As outlined in the grant application, the Washoe County School District will continue to align efforts with its strategic plan, its established 21st Century Goals, and Common Core State Standards. The projected investments include:

- Continue collecting and editing classroom videos demonstrating 21st Century Learning
- Roll out 21st Century Educator Badge Program by providing professional development that frames technology integration as an imperative for 21st Century competencies. The 21st Century Educator Badge Program is a professional development “certification” program that is structured around three levels. For example, the first level is the 21st Century Educator: Explorer Badge, which provides an overview of the six dimensions of 21st Century Learning, and related classroom strategies. The 21st Century Educator: Practitioner Badge goes into far more depth in applying the six dimensions to CCSS instruction by differentiating PD opportunities, deeper strategies, and related skills. Finally, the 21st Century Educator: Leader Badge will be centered on leadership practices around 21st Century learning (e.g. coaches, professional development instructors, site leaders). The overall goal is to develop a cadre of highly skilled individuals who can lead the process of change in schools and enable sustainability.
- Continue professional development for teachers. These workshops will place emphasis on integration of technology within that context of high quality teaching and learning. The goal of these workshops will be to promote the use of

technology to foster innovative instruction aligned with Nevada Academic Content Standards (NVACS).

- Increase the number of teachers in the technology applications cohort (likely 2-3 teachers)
- Develop a physical space to conduct 21st Century Learning professional development for teachers aligned with the grant. This will focus on support of district trainers, examples of technology integration, and model applications. The space will serve to model technology when professional development seeks to illustrate applications.

Again, it is important to note that documents and interviews of district level staff indicated that projects had been reduced in relationship to the amounts of funding reductions from the original grant proposal. However, the district was very positive about the impacts of the funded projects.

WHITE PINE COUNTY SCHOOL DISTRICT

The White Pine County School District focused on three priorities: 1:1 Student Computing, Smarter Balance Assessment, and Common Core State Standards. The funds were invested in 105 ChromeBooks, which were issued to selected teachers in “classroom sets” with carts for storage. The criteria for selection included a demonstrated interest in integrating technology into their classroom. The district used other funds to purchase carts and to support professional development. White Pine County School District was awarded \$30,660 for FY14 and no funds for FY15.

That is, the district received its total award during the first year; this enabled the district to purchase a larger number of laptops during the first year. The district implemented the project upon receipt of the equipment in early 2014. ChromeBooks are small laptops with a 12 inch screen and a keyboard. ChromeBooks have a small amount of internal storage and the ability to connect to the internet. The primary storage is through “cloud

computing.” In addition, ChromeBooks can be used in a standalone format. The district has developed policies and procedures related to ChromeBook use and has restricted access to approved applications.

Evaluators met with the representatives of the White Pine County School District during early May 2014. The key personnel interviewed at White Pine County School District included central office personnel, a math teacher and an English teacher. The classrooms of both teachers were visited and students were observed using the ChromeBooks. Examples of student work were discussed.

The English teacher provided examples of applications within her classroom. She explained that the ChromeBooks were linked to increased student interest, improved quality of assignments, and increased student motivation. She provided examples of each. She was extremely pleased to have access to the 1:1 Student Computing technology.

The math teacher was equally excited about the 1:1 Student Computing technology. He explained that he was able to locate applications that support most math concepts which he taught. He explained that the use of ChromeBooks promoted higher student interest and increased motivation. He provided examples of student successes and examples on increased student engagement and demonstrated the use of laptops to support his teaching and learning. One of the math classes was observed. Students were actively engaged in the lesson. They worked individually and in small groups. The lesson observed represented a blended approach; students used online lessons, small group activities, and class work. The teacher provided examples of support materials that were aligned with the lesson which he was able to offer students. The software recorded student progress and provide practice exercises. The illustrations provided by the teacher were impressive. Both White Pine teachers were very positive about the technology.

The district was concerned about the quality of the internet connection. Several of the people interviewed provided examples. As an illustration, it is common practice to limit the number of computers with access at one time because of capacity. At the time of the

site visitation, the district was conducting a pilot study with respect to Smarter Balance Assessments testing. The district restricted all other student access to the internet during the pilot of SBAC, with the hope that the system could support a few students testing online.

The district explained bandwidth problem. Quality internet access is a significant issue for White Pine County School District.

ELEARNING FOR EDUCATORS (E4E)

The state wide online professional development project, eLearning for Educators (e4e), was awarded \$5,000 for FY14 and \$5,000 for FY15. This amount will be used for administrative salary. Elko County School District served as the fiscal agent for this grant. The eLearning for Educators project is operated as a collaborative effort of Washoe County School District, Elko County School District, and KNPB Channel 5 Public Television. The courses are online and can be structured to meet timelines of individual teachers. The e4e project employs an individual who is responsible for monitoring discussion boards, managing facilitators, the gathering, collecting, and reporting of data, registration, marketing, writing applications and receiving approval for in-service and graduate credit, and ensuring the development of new courses each year.

Evaluators met with the project director, to discuss the e4e project. It is a state-wide project to provide professional development for teachers throughout Nevada. The funding for the project was significantly reduced during the current round of State Educational Technology Implementation Fund Grants. The funding was reduced to \$5,000 for each year from \$65,000 for the previous round of SETIF awards. These funds will be used for administrative salary for the project.

In past funding cycles, the State Educational Technology Implementation Fund Grants were used for development of online classes, to provide stipends for instructors, and to purchase online classes. As a result of the limited funding, these types of services will not be purchased through the grant. The group will continue to work to provide limited

online classes through other sources as funds are available. It is important to note that grant funding is only a minor part of the funding for the eLearning for Educators project; however, the level of funding will result in a significant reduction in available professional development for Nevada teachers.

It is important to note that technology is a tool to support effective teaching and learning. It does not represent a silver bullet to magically transform learning. However, in today's educational setting, high quality technology is a basic requirement. Extensive research has linked effective use of technology to student achievement. However, direct links between technology and improved student achievement are difficult to establish.

SECTION V: RESULTS OF SURVEYS

Two surveys were administered in May; one was distributed to the teachers who were directly impacted by SETIF funds and the other was distributed to the funded districts' technology directors. The following two sections briefly discuss the results of each of these surveys.

Drs. Ewing-Taylor and Thornton developed two surveys related to the State Educational Technology Implementation Fund Grants. The focus of the surveys was to collect information from teachers directly impacted by SETIF funds and from district technology directors. The first was designed for district directors of technology and the other was designed for classroom teachers. The surveys were administered through electronic means. All directors were asked to complete the survey and each director was asked to forward an electronic link to all teachers who were **directly impacted by the SETIF grants**. For example, a teacher who received 1:1 Student Computing technology in his/her classroom would receive the teacher survey link. Thus all technology directors, who work in funded districts, were asked to complete the survey designed for the directors. Each in turn, the directors were asked to send the link for the teacher survey to all teachers in their district who were directly impacted by the funds. The

intent was to survey all technology directors and all teachers, who were directly impacted by the grants.

RESULTS FROM TEACHER SURVEY

A brief survey was developed to assess the impact of the SETIF funds on teachers and their students. The timing of this survey was not ideal, because May is close to the end of the school year, districts are engaged in some form of testing, and teachers are typically bombarded with end-of-year activities. However, there was good response from several districts. It should be noted that survey response will continue to be an issue for this evaluation, due to the timing of the grants. Survey data for the final, summative report will be collected earlier to enable follow ups and to avoid end of year activities.

The following graphs provide summaries of the results. The majority of the teachers indicated that they had taught more than 10 years (58%); this information is summarized in Table 10. Most of the respondents taught in grades 6th through 8th; many of the respondents indicated that they taught multiple grade levels (e.g. 6th, 7th, and 8th). This information is summarized in Table 11. The respondents taught a full range of subjects with the core subjects most often indicated (Social Studies, Math, ELA, and Science). This information is summarized in Table 12.

Table 10 Years Taught

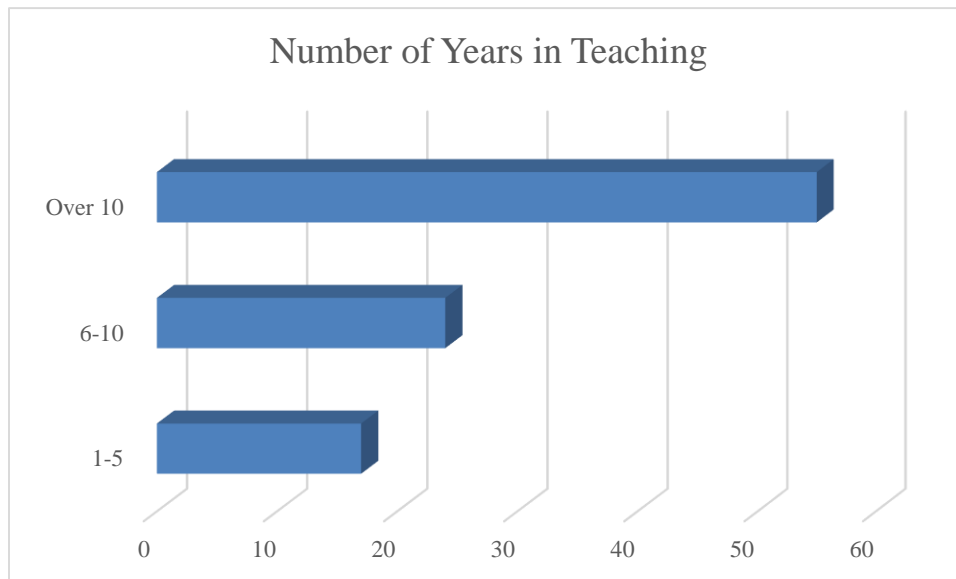


Table 11 Grades Taught

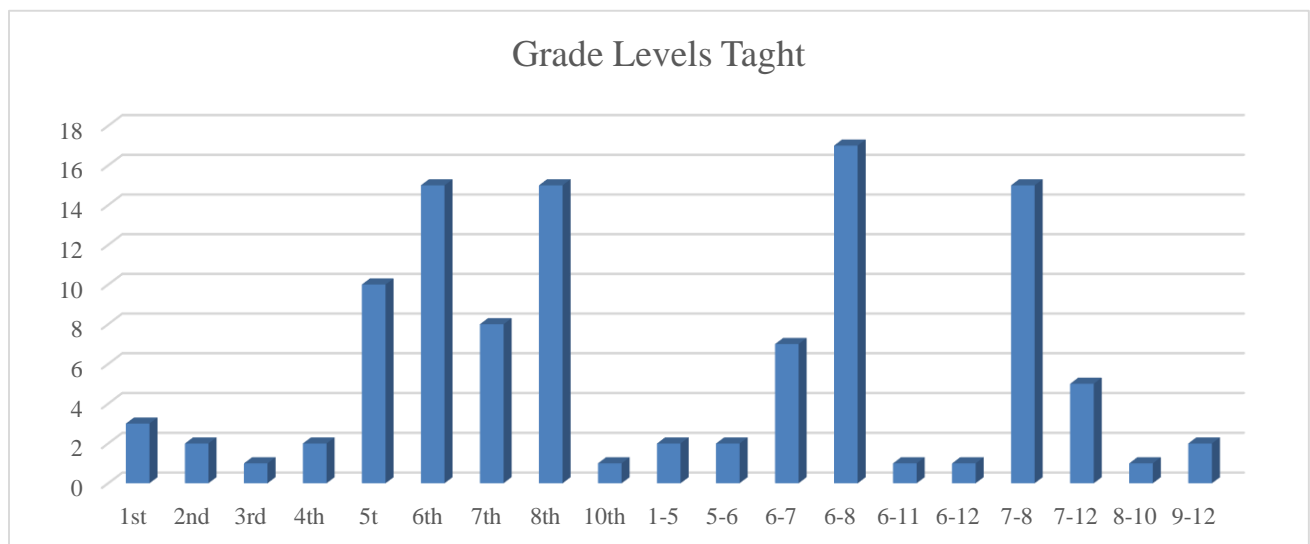
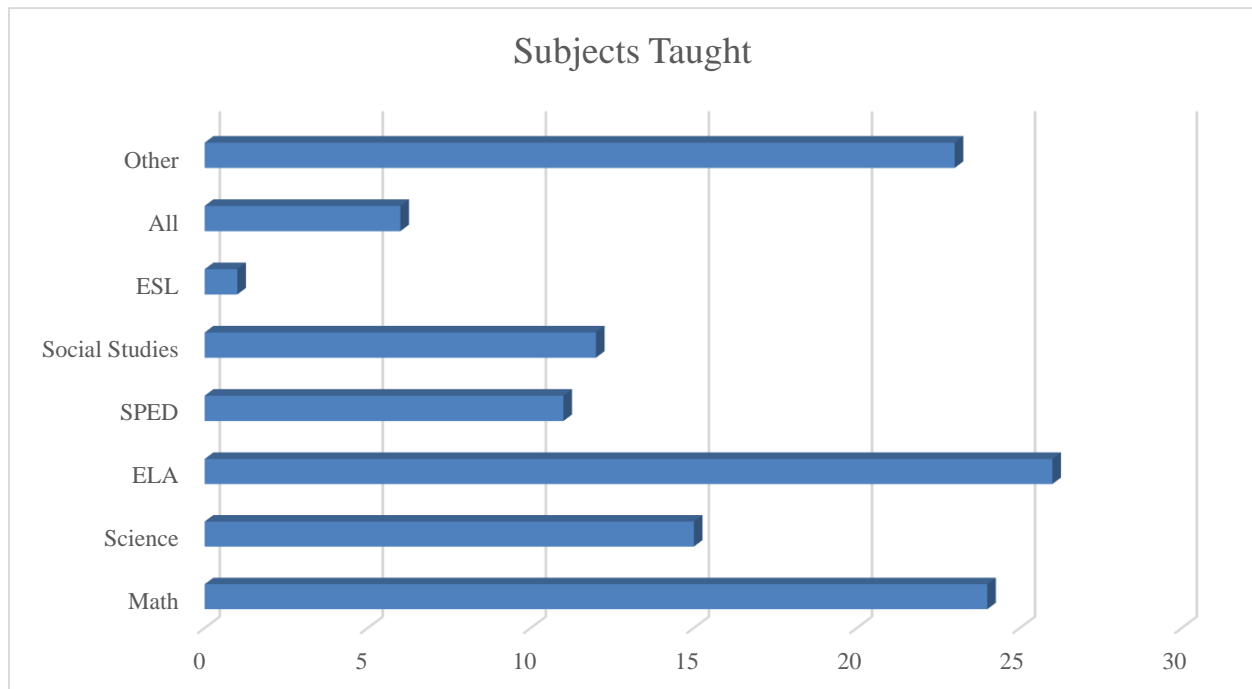


Table 12 Subjects Taught



In the districts that provided professional development in technology, the training was delivered mainly by another teacher within the respondents' school or from another school. Questions related to the value of the professional development indicate a general satisfaction with the training. There were seven items related to professional development with five response choices ranging from Strongly Disagree (1) to Strongly Agree (5). Table 13 contains a summary of the questions and responses. In general, respondents seemed to feel that the professional development which they received was valuable. However, the responses hovered around mid-range of the scale, which indicates that there is some room for improvement.

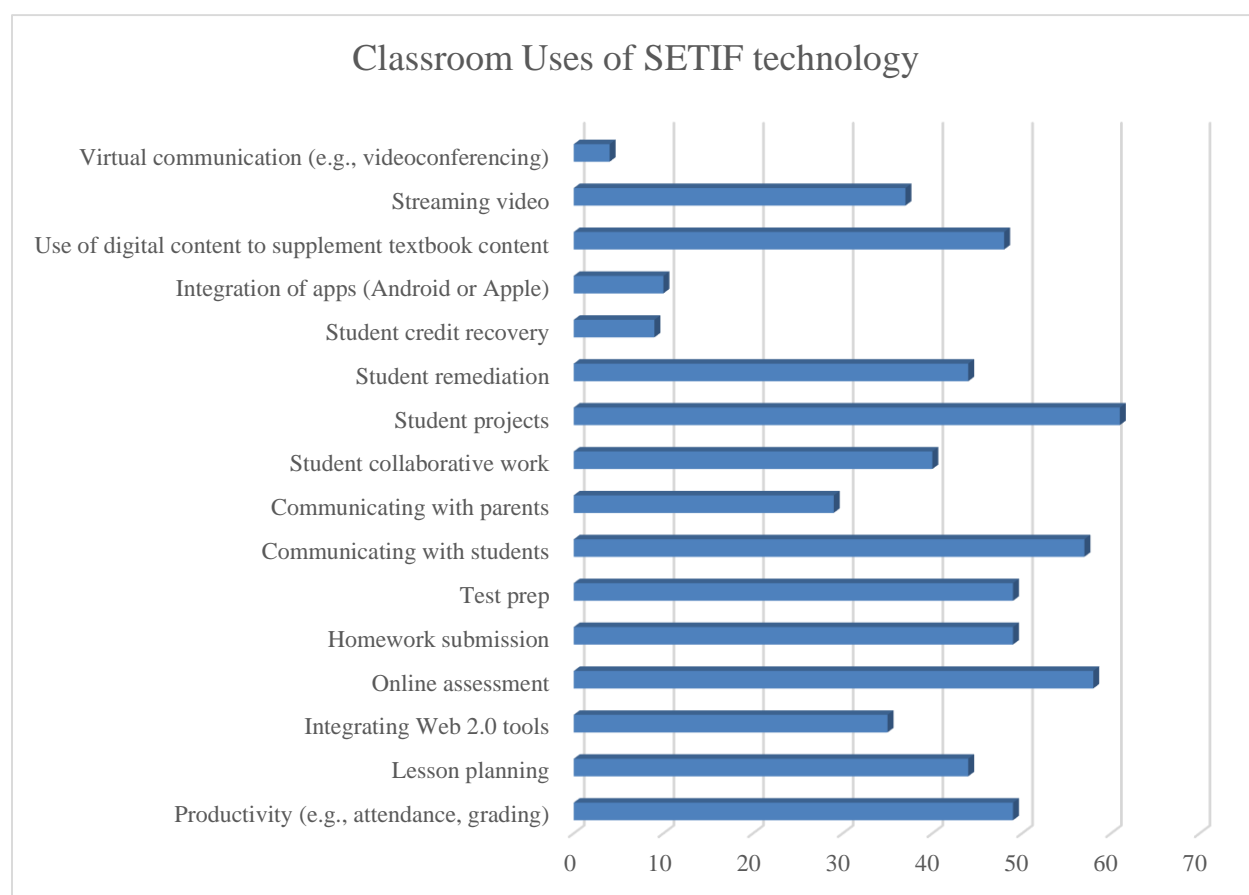
Table 13 Professional Development

Statement	Mean Response (n=91)
Participating in the technology training was a good use of my time.	4.01
Participating in the CCSS training was a good use of my time.	3.86
The available training was relevant to my immediate technology integration needs/interests.	3.96
I learned a technology skill/strategy that I could immediately put to use in my classroom.	4.07
I had sufficient support in learning how to use the technology in my classroom.	3.94
The PD provided me with resources that will help me integrate technology into the CCSS.	4.01
The PD provided me with strategies for planning lessons that integrate technology into the CCSS.	3.83

Homework submission and test preparation (49 responses each)

When asked how they were using the SETIF technology, respondents replied with a wide variety of uses. The most frequently listed uses of the SETIF technology were 1) student projects (61 responses); 2) online assessments (58 responses); 3) Communication with students (57 responses); and 4) productivity, homework submission, and test preparation (tied with 49 responses each). The least used technologies were 1) virtual communication (4 responses); 2) credit recovery (9 responses); 3) integration of apps (10 responses); 4) and communication with parents (29 responses). Table 14 summarizes the responses. Thus, the teachers indicated that new applications were most often related to student projects and online assessments. While the least used application was virtual communication.

Table 14 Uses of SETIF Technology



A final section of the survey asked teachers about their beliefs regarding educational technology and its effects in the classroom. The survey is based on the self-efficacy research of Bandura (1997), Heneman, Kimball and Milanowski (2006) and Ingvarson, Meiers and Bevis (2005). These researchers indicate that teachers with greater self-efficacy generally are more effective and their students achieve at higher levels than teachers with lower self-efficacy. The results of this survey will be compared to the results of the same survey next year and gains or losses in self-efficacy will be discussed in the final report. For this section, there were 24 questions which the respondents answered using a five-point scale: Nothing (1), Very Little (2), Some Influence (3), Quite a Bit (4) or A Great Deal (5). For the purposes of this interim report, Table 15 shows the questions and scores on the self-efficacy section of the survey. These results

will be treated as baseline data and will be compared to next year's results. The only observation herein, is that the responses trended toward the upper end of the scale. That is "Nothing" and "Very Little" were not often selected.

Table 15 Teacher Self-Efficacy

Question	Nothing	Very Little	Some Influence	Quite a Bit	A Great Deal	Mean Rating
How much can you do to get through to the most difficult students?	2.27%	2.27%	39.77%	38.64%	17.05%	3.66
How much can you do to help your students think critically?	1.14%	0.00%	25.00%	51.14%	22.73%	3.94
How much can you do to control disruptive behavior in the classroom?	2.27%	2.27%	14.77%	50.00%	30.68%	4.05
How much can you do to motivate students who show low interest in school work?	2.27%	1.14%	37.50%	45.45%	13.64%	3.67
To what extent can you make your expectations clear about student behavior?	1.14%	0.00%	6.82%	35.23%	56.82%	4.47
How much can you do to get students to believe they can do well in school work?	1.14%	0.00%	15.91%	51.14%	31.82%	4.13
How well can you respond to difficult questions from your students?	1.14%	0.00%	5.68%	46.59%	46.59%	4.38
How well can you establish routines to keep activities running smoothly?	1.14%	0.00%	2.27%	35.23%	61.36%	4.56
How much can you do to help your students value learning?	1.14%	0.00%	20.45%	52.27%	26.14%	4.02
How much can you gauge student comprehension of what you have taught?	1.14%	0.00%	3.41%	65.91%	29.55%	4.23
To what extent can you craft good questions for your students?	1.14%	0.00%	6.82%	65.91%	26.14%	4.16
How much can you do to foster student creativity?	1.14%	1.14%	21.59%	48.86%	44.32%	4.00
How much can you do to get children to follow classroom rules?	1.14%	0.00%	5.68%	48.86%	44.32%	4.35
How much can you do to improve the understanding of a student who is failing?	1.14%	0.00%	27.27%	55.68%	15.91%	3.85
How much can you do to calm a student who is disruptive or noisy?	1.14%	0.00%	18.05%	59.09%	22.73%	4.02
How well can you establish a classroom management system with each group of students?	1.14%	0.00%	6.82%	55.68%	36.36%	4.26
How much can you do to adjust your lessons to the proper level for individual students?	1.14%	0.00%	6.82%	61.36%	30.68%	4.20

Question	Nothing	Very Little	Some Influence	Quite a Bit	A Great Deal	Mean Rating
How much can you use a variety of assessment strategies?	1.14%	1.14%	9.09%	56.82%	31.82%	4.17
How well can you keep a few problem students from ruining an entire lesson?	1.14%	4.55%	13.64%	52.27%	28.41%	4.02
To what extent can you provide an alternative explanation for example when students are confused?	1.14%	0.00%	3.41%	50.00%	45.45%	4.39
How well can you respond to defiant students?	1.14%	3.41%	17.05%	55.68%	22.73%	3.95
How much can you assist families in helping their children do well in school?	1.14%	1.14%	40.91%	42.05%	14.77%	3.68
How well can you implement alternative strategies in your classroom?	1.14%	1.14%	13.64%	57.95%	26.14%	4.07
How well can you provide appropriate challenges for very capable students?	1.14%	0.00%	12.50%	60.23%	26.14%	4.10

EDUCATIONAL TECHNOLOGY DIRECTORS SURVEY

As discussed above, a survey was developed and sent to the educational technology directors of each grantee county. Six directors responded: Clark, Elko, Lincoln, Lyon, Washoe and White Pine. The first eight questions asked about numbers of students, teachers, and schools. These questions were primarily used for verifying information gathered from other sources. Three questions were open-ended and designed to allow greater flexibility and to elicit greater detail than the questions in the teacher survey. Because there were only six respondents, all answers to the open-ended questions are detailed in Table 16.

Table 16 Open-ended responses from ed. tech. directors

Question	Responses
<p>What are the impacts of these grant funds on students and teachers in your district? Include impacts that you have seen as well as impacts that have been reported to you by participating teachers or students.</p>	<ul style="list-style-type: none"> • This grant funds all infrastructure upgrades. Project will be completed over summer 2014. Project included upgrading wireless to 802.11N for density at two schools, Fernley Elementary and Fernley Intermediate. The second part of the grant allowed for the upgrade of the district's connection to the Internet from 100Mbps to 200Mbps. • Teachers in tech-rich and non-tech-rich environments are incorporating more 21st Century Competencies into their instructional practices because of the training in the WCSD Six Dimensions of 21st Century Learning. Teachers we have observed who have access to technology, either grant provided or previously existing, are becoming better able to incorporate the technology meaningfully into instruction. • The digital learning coaches conducted trainings for groups of teachers at 87 schools. They reported increased use of technological tools, such as SmartBoards, increased use of the Internet, confidence increase for project-based learning, and a great deal more collaboration. • Increase student involvement and participation as observed by teacher/administrator. Increase student skills in mathematics as measured by CRT and MAP. Increased teacher validation for use of technology skills to improve instruction as measured by surveys of teachers. • We had some initial problems with implementing the system that caused some frustration with teachers. We had some serious issues the last time we did MAP testing. Currently those problems have been resolved. We have had problems in one school with some older technology connecting to the new wireless network, but we believe we will be able to solve this issue as well. Now that the system is working, we can now facilitate Bring Your Own Device (BYOD). Several students are now regularly connecting to the Internet with their own devices while at school. The system is now robust enough that online testing such as NWEA and SBAC should work without the connectivity issues we had in the past with our old system. We tested this with the spring MAPS test, and as I stated above, we had several problems. But we are confident that these issue are resolved and we will be able to evaluate the how the system handles online testing this fall. The old wireless system has been moved to C.O. Bastian High school and is being implemented there and should be adequate for their needs. • These grant funds were used to purchase classroom sets of laptops. These laptops were provided to 4 teachers. The students in these teachers' classrooms have access to the laptops during class each day. These teachers have course work developed in an online classroom called Canvas. The students access blended learning lesson through the teachers Canvas class. The lessons contain digital content, instructional videos, practice activities, quizzes, class discussions, and assignments. Some of the impacts we observed during our classroom visits are: increased student engagement, differentiation, decreases in

	<p>behavior issues, and increased involvement of students in class discussions. Some of the impacts that that teachers and students have reported are: the benefits of being able to access the online classroom from home, access to learning resources in the classroom with their laptops, the multiplier effect of access to a computing device and technology integrated lessons (Students have access to a lot of instructional designed by their teachers we do not see many students with their hand raised waiting for help from their teachers.)</p>
<p>What are your plans to document outcomes for your project, e.g. student achievement, teacher proficiency?</p>	<ul style="list-style-type: none"> • The implementation of this program started at the beginning of second semester for SY 11-12. The State MAPS and CRT scores for the spring 2012 were considered a “baseline” for the students. Wexfor.org reported that although NV changed the scoring procedure for writing assessments during the 2012-13 school year, while the 1:1 program was in place, FIS met AYP and saw a 97 percent increase over the previous year, while the 1:1 program was in place, FIS met AYP and saw a 97 percent increase over the previous year, in the percentage of students who met or exceeded the benchmark on the State Writing Assessment. In 2011-2012, only 34% of 5th graders met or exceeded the benchmark, compared to 67% who met or exceeded it in 2012-2013. During school year, SY13-14, LCSD continues to monitor and record the success of the program using the following assessments: NV Writing Assessment, State CRT and MAPs. • Data collection centered on teaching practices aligned to the WCSD Six Dimensions of 21st Century Learning. • The digital learning coaches are being surveyed, electronically. They will then discuss what they have seen in a focus group on June 2. In addition, exemplars from classrooms will be archived and available on the internet. • Student engagement in the classroom through observation. Student MAP and CRT scores will measure academic performance survey will measure teacher qualitative response to use of technology. • We are monitoring network usage. We have already seen a very significant increase in network traffic, so we know that more connectivity is happening. We administer the NWEA MAPS test three time per year. As students use the technology and increased connectivity more we hope that when they take this test and the SBAC test they will be better prepared academically because of greater access to online learning tools. We also hope that we will have increased validity in the results due to students being familiar with how to use the technology to take these tests and greater reliability during testing. • We observed each classroom three times each year and rate the teachers on their level of technology integration and their use of the online classroom Canvas. We also rate the students’ level of comfort with the technology they are using. We are tracking student grades and test data and comparing it to student data from classrooms that do not have access to this technology.

<p>What are the major roadblocks to implementing the priorities you proposed in your grant?</p>	<ul style="list-style-type: none"> • Our WAN exists on mountain tops - wind and weather caused delays. The age of our buildings and the materials they are made of. Lack of Internet Middle and Last Mile vendors in our area. • The 21st Century Learning Space has been delayed due to an internal lack of clarity regarding use of professional learning spaces. We will be implementing this part of the project during the 2014-15 year upon locating an appropriate space within the district. • Teachers are so focused on tools, rather than teaching. We're slowly changing that. • Due to limited financial resources and limited funding laptops carts became a general fund issue. Connectivity will be ongoing issues for schools throughout the district which means staggering technology use. Process was much improved over previous years. • One roadblock was teacher frustration as we installed new devices and worked the bugs out of them. Teachers that have come to rely on the network seem to panic when it is down for a couple of hours. Most teachers were understanding and only were only slightly irritated, but in a few extreme cases it was difficult. Another roadblock was a communication problem between our district office and the state DOE when it came to getting funds released. All roadblocks were eventually resolved and we moved forward, albeit a couple of months later than we anticipated. • Funding. We were awarded 50% of the grant funds we requested in our application. This cut 4 classrooms out of our project.
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In general, the responses of the technology directors were positive. They indicated that the impacts of the SETIF grant were positive. They indicated that they had been able to solve problems. Consistently, throughout the evaluation process, the need for additional funding was an issue.

SECTION VI: REPORT SUMMARY

It is the professional opinion of the evaluators on the SETIF grants project that all of the participating districts are on track and in compliance with the terms of their individual grant projects. The implemented programs are aligned with the proposed projects with proportional reductions related to funding. Some districts leveraged the SETIF money with other funds to expand implementation of technology into the classrooms.

There are no significant deviations from plan and all grantees have implemented their first year activities with fidelity to their grant documents.

REFERENCES

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